#### REMARKS

Claims 1-20 are pending in this application. Claims 16 and 18 have been withdrawn from consideration. Claims 1-15, 17, and 19-20 are rejected.

By this paper, claims 1, 3, 10, and 11 are amended.

The applicants believe that in view of these amendments and the following discussion, all of the claims in this application are allowable. If, however, the Examiner believes that there are any unresolved issues requiring adverse action in any of the claims no pending in the application, it is requested that the Examiner telephone Jeffery J. Brosemer, Ph.D., ESQ. at 732-335-5773 so that arrangements may be made for resolving such issues as expeditiously as possible.

### Claim Rejections - 35 U.S.C § 101

Claims 1 and 10 are rejected under the provisions of 35 U.S.C § 101 as being directed to non-statutory subject matter. In particular the Examiner stated in the office action that the claimed invention does not produce a useful, concrete, and tangible result.

In response, the applicants have amended claims 1 and 10 such that they now explicitly recite the production and/or output of an optical signal exhibiting a regulated, amplified optical power.

Consequently, the applicants submit that a useful, concrete, and tangible result is produced and therefore amended claims 1 and 10 do claim statutory subject matter. The applicants now respectfully request the Examiner to withdraw these rejections under the provisions of 35 U.S.C § 101.

# Claim Rejections - 35 U.S.C § 112

Claims 1, 2, 3 and 11 are rejected under the provisions of 35 U.S.C § 112. More particularly, the Examiner noted a number of recitations having insufficient antecedent basis. In response, minor amendments have been made to claims 1, 2, 3, and 11 to provide such proper antecedence. The applicants now request the Examiner to withdraw these rejections.

# Claim Rejections - 35 U.S.C § 102(a)

Claims 1-5, 9-12, 17, and 20 are rejected under the provisions of 35 U.S.C § 102(a) as being anticipated by an article entitled "10-Gb/s RZ-DPSK Transmitter Using a Saturated SOA as a Power Booster and Limiting Amplifier", published in IEEE Photonics Technology Letters, Vol.16, No.6, pp 1582-1584, 2004, authored by Xing Wei, Yikai Su, Xiang Liu, Juerg Leuthold and S.Chandrasekhar (hereinafter Leuthold IEEE paper).

Appl. No. 10/790,434 Amendment Dated January 7, 2009 Reply to Office Action of October 9, 2008

The applicants rebut this *prima facie* assertion by now showing that this reference was derived from applicant's own work.

As the Examiner can surely appreciate, the applicants' disclosure of his own work within the year before the filing date cannot be used as a reference against that application. Accordingly, the applicants submit with this paper a specific declaration by the applicant (Xiang Liu) that the referenced Leuthold IEEE paper is describing the applicant's own work.

The applicants submit that this declaration (which was previously submitted with an earlier communication) - coupled with the fact that the Leuthold IEEE paper is a research paper - is sufficient to establish that the work described in the Leuthold IEEE paper is in fact the work of the named co-inventors of the instant application. As the Examiner surely knows, people involved only with experimental testing are normally listed as coauthors on research papers but are not considered co-inventors of patent applications.

Accordingly, the applicants now respectfully request the Examiner to withdraw the rejections under the provisions of 35 USC § 102.

## Claim Rejections - 35 U.S.C § 103(a)

Claims 6-8, 13-15 and 19 are rejected under the provisions of 35 U.S.C § 103(a) as being unparentable in view of the Leuthold IEEE paper.

As already shown above, the Leuthold IEEE paper is in fact the applicant's own work. Consequently it is an improper reference for the purposes of 35 USC § 102. In addition, the applicants note that this Leuthold IEEE paper was not published until well after the filing date of the instant application. That is to say, while the manuscript was received on December 24, 2003, and revised on February 9, 2004, it was not published until June 2004.

Consequently, the applicants submit that this Leuthold IEEE paper is <u>not</u> a proper reference for the purposes of 35 USC § 103 and the applicants now respectfully request the Examiner to withdraw these rejections.

#### Conclusion:

The applicants submit that all of the claims now present in the application fully comply with the provisions of 35 U.S.C. § 101, 102, 112, and 103 and are therefore allowable. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited. Appl. No. 10/790,434 Amendment Dated January 7, 2009 Reply to Office Action of October 9, 2008

> Respectfully submitted, JEFFERY J. BROSEMER

By s/Jeffery J. Brosemer/ Jeffery J. Brosemer Reg. No. 36,096 Tel.:(732)335.5773

# **CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 1.8(a)**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office on January 7, 2009.

s/Jeffery J. Brosemer/ Signature

Jeffery J. Brosemer

Typed or printed name of person signing certificate

36,096 (732)335-5773

Registration Number Telephone Number